



Solar Electrical Permit Application

City of Maple Grove
Fax 763-494-6417 Phone 763-494-6062
12800 Arbor Lakes Pkwy, P.O. Box 1180
Maple Grove, MN 55311

For Office Use Only

Permit # _____

Permit Cost _____

Date Received _____

Job Site Address: _____ Suite/Unit #: _____

Tenant: _____

Property Owner/General Contractor

Name: _____

Address: _____

City: _____ State: _____ Zip: _____ Phone #: _____

Contractor

Company Name: _____

EA License #: _____ Exp. Date: _____ Contact Person: _____

Phone #: _____ Email: _____

Address: _____

City: _____ State: _____ Zip: _____ Office Phone #: _____

Work Type

New	Add Repair
-----	---------------

Required Information:

Line Item Diagram of System Required with Application
Existing Roof Layout (prior to solar installation)
Proposed Solar Layout on Roof

Job Value: \$ _____

Additional Information at WWW.DLI.MN.GOV

Job Value \$ _____

Site Address _____

Commercial Electrical Inspection Fee Schedule/Worksheet		
Item Description		Fee
0 – 5,000 watts	60.00	
5,001 – 10,000 watts	100.00	
10,001 – 20,000 watts	150.00	
20,001 – 30,000 watts	200.00	
30,001 – 40,000 watts	250.00	
40,001 – 1,000,000 watts	250 and \$25 for each additional 10,000 watts over 40,000	
1,000,000 – 5,000,000 watts	\$2,650 and \$15 for each additional 10,000 watts over 1,000,000 watts	
5,000,000 watts and larger	\$8,650 and \$10 for each additional 10,000 watts over 5,000,000	
State Surcharge – to be included in each permit		1.00
Permit Fee Total		\$

Permit becomes void if the work does not begin within 180 days or is suspended at any time for over 180 days. Permits issued and inspections made by the City are a public service and do not constitute any representation, guarantee or warranty, either implied or expressed, to any person as to the condition of the building or conformance to applicable construction codes. The undersigned acknowledges that this application had been read and that the above is correct and agrees to comply with all the ordinances and laws of the City of Maple Grove. **Periodic and/or final inspection of this work is required by the Minnesota State Building Code. It is the responsibility of the applicant to call the Maple Grove Inspection Division at 763-494-6060 to schedule an Inspection.**

Applicant's Signature _____ Date _____

**WE ACCEPT MASTERCARD, VISA, DISCOVER, and AMEX
FOR PERMIT FEES TOTALING LESS THAN \$1000**

This information will be destroyed after the permit has been processed.

Under Minnesota law the information provided on this application is considered public and is available to anyone, except for the following:

The information regarding your credit card is private and will be provided only to you and to those people necessary to process your payment. This includes city employees who process your payment and employees of applicable financial institutions. You are not required to provide your credit card information if you want to pay by another method. However, if you choose to pay by credit card you must provide your credit card information to pay the appropriate fee. Otherwise, your application will not be processed.

To Pay By Credit Card MasterCard Visa, Discover, or AMEX	Name as it appears on card: _____
	Type of Credit Card: € Visa € MasterCard € Discover € AMEX
	Expiration Date: ____ / ____ / ____
	Account Number: _____
	CVC # _____
	Signature: _____ Date: _____
	Billing Address: _____
	City: _____ State: _____ Zip Code _____

Notice: Faxed applications will not be processed without credit card payment info completed.

Solar PV Inspection Checklist for REI #ELE- _____ Installer _____

Job Address _____ City/Township _____

PV Inverter

- ☐ Is the PV system utility-interactive or stand alone? 690.2
- ☐ Is all the equipment listed for PV application? 690.4
- ☐ Is the system grounded or ungrounded? (if ungrounded, the system needs to comply with 690.35)
- ☐ Has DC Ground-Fault Protection been provided and properly labeled? 690.5 & 690.35(C)?
- ☐ What is the maximum PV system voltage? 690.7
- ☐ Is all listed equipment rated for the maximum voltage? 690.7
- ☐ Determine the maximum circuit current for the PV Source and Output Circuit; Inverter Output Circuit; Stand-Alone Inverter Input Circuit; and DC to DC Converter Output (refer to inverter documentation)

Wiring Methods and Disconnecting Means

- ☐ Are the conductor and cable ampacities determined at 125% before adjustment factors? 690.8 (B)
- ☐ How are the PV Source and Output Circuit protected from overcurrent? 690.9 (A&B)
- ☐ Do AC or DC OCPD's have the appropriate voltage, current and interrupt ratings? 690.9(C)
- ☐ Has arc-fault circuit protection been provided for DC source and/or output circuits? 690.11
- ☐ Is a rapid shutdown required and if so, how is it accomplished and identified? 690.12
- ☐ Is the PV disconnect permanently marked and installed in a readily accessible location? 690.13
- ☐ Has the fuse disconnecting means, if required, been installed? 690.16
- ☐ Are PV source or output circuits > 30 volts in a raceway or guarded if readily accessible? 690.31
- ☐ Is single conductor cable used outdoors Type USE-2 or listed & labeled PV wire? 690.31(C)
(Ungrounded systems must be labeled PV wire only. 690.35)
- ☐ Are PV source or output circuits on or inside a building in a metal raceway and marked? 690.31(G)
- ☐ Are all connectors polarized, guarded, latching-type or tool-safeguarded, rated to interrupt the available current or labeled "Do Not Disconnect Under Load"? 690.33

System Grounding

- ☐ Has the system been grounded at one single point? 690.42
- ☐ Are all exposed non-current carrying metal parts of the PV system grounded? 690.43(A&B)
- ☐ Are the mounting structures or systems used for equipment grounding? 690.43(C&D)
- ☐ Are the interconnecting devices used for equipment grounding listed and identified? 690.43 (C&D)
- ☐ Is the EGC properly sized and protected if exposed and smaller than #6? 690.50, 250.122, 250.120(c)
- ☐ Has the grounding electrode system been installed? 690.47
- ☐ If both are present, has the DC grounding electrode system been bonded to the AC GES? 690.47(C)
- ☐ Was an auxiliary electrode installed at the array? 690.47 (D)





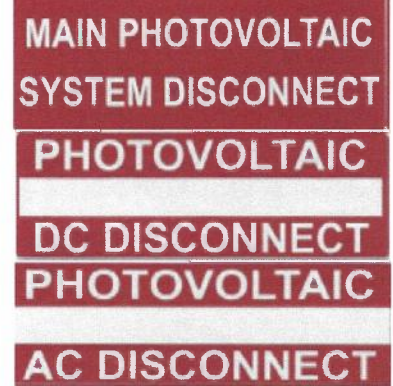
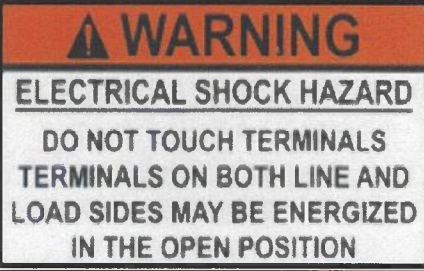
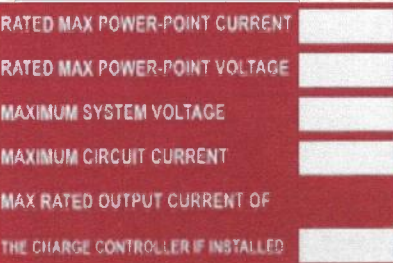




Interconnection

- ☐ Has a plaque or directory been installed at each disconnecting means (capable of interconnection) denoting all electric power sources & power production sources? 705.10
- ☐ Has the point of connection to other sources been installed per 705.12? 690.64
- ☐ Is the supply side disconnect readily accessible and within 10' of the connection point? 705.12 (A)
- ☐ Are the utility interactive inverters connected to the system through a dedicated circuit breaker or fusible disconnecting means? 705.12(D)(1)
- ☐ Does the bus or conductor ampacity comply with 705.12(D) (2)?
- ☐ Have all the required labels been applied?

Required Documentation

- Manufacturer's specifications for the inverter
- Manufacturer's specifications for the module
- Manufacturer's specifications for the optimizer (if used)
- Verification that the racking system grounding and bonding is listed

NEC Labeling Requirements

Section	Location of Label	Label Text and Appearance		Location of Label	Label Text and Appearance
690.5(C)	Shall appear on the utility-interactive inverter or be applied by the installer near the ground-fault indicator at a visible location		690.54	All interactive system(s) points of interconnection with other sources shall be marked at an accessible location at the disconnecting means as a power source and with the rated ac output current and the nominal operating ac voltage.	
690.35(F)	Shall be labeled with the following warning at each junction box, combiner box, disconnect, and device where energized, ungrounded circuits may be exposed during service.		690.56(B) 690.4(D) 705.10 705.12(D)(3)	A permanent plaque or directory, denoting all electric power sources on or in the premises, shall be installed at each service equipment location and at locations of all electric power production sources capable of being interconnected.	
690.13(B) 690.15	Each PV system disconnecting means shall be permanently marked to identify it as a PV system disconnect.		690.17(E)	Where all terminals of the disconnecting means may be energized in the open position, a warning sign shall be mounted on or adjacent to the disconnecting means.	
690.53	A permanent label for the direct-current PV power source indicating the information specified in (1) through (5) shall be provided by the installer at the PV disconnecting means.		705.12 (D)(2)(3)(b)	A permanent warning label shall be applied to the distribution equipment adjacent to the back-fed breaker from the inverter.	
			705.12 (D)(2)(3)(c)	Permanent warning labels shall be applied to distribution equipment	
			690.56(C)	Buildings or structures with both utility service and a PV system, complying with 690.12, shall have a permanent plaque or directory. Stating:	
690.31(G)(3)	The following wiring methods and enclosures that contain PV power source conductors shall be marked: (1) Exposed raceways, cable trays, and other wiring methods (2) Covers or enclosures of pull boxes and junction boxes (3) Conduit bodies in which any of the available conduit openings are unused		690.31(G)(3)	Where circuits are embedded in built-up, laminate, or membrane roofing materials in roof areas not covered by PV modules and associated equipment, the location of circuits shall be clearly marked.	